

Listing of Claims

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Original): A $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ compound, which incorporates a negative hydrogen ion (H^- , H^{2-} , H_2^-) at a concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more.
2. (Original): A $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$ compound, which incorporates a negative hydrogen ion (H^- , H^{2-} , H_2^-) at a concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more.
3. (Original): A mixed crystal compound of $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ and $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$, which incorporates a negative hydrogen ion (H^- , H^{2-} , H_2^-) at a concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more.
4. (Original): The compound as defined in either one of claims 1 to 3, which has an electronic conductance equivalent to an electric conductivity of 10^{-5} Scm^{-1} or more.
5. (Original): The compound as defined in either one of claims 1 to 3, which exhibits a sustained increase in electronic conductivity by means of irradiation with ultraviolet ray or X-ray.
6. (Original): The compound as defined in either one of claims 1 to 3, which has an ionic conductance derived from the negative hydrogen ion (H^- , H^{2-} , H_2^-).

7. (Original): A method of producing the compound as defined in either one of claims 1 to 3, comprising subjecting either one selected from the group consisting of a $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ compound, a $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$ compound, and a mixed crystal compound of $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$ and $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$ to a heat treatment at a temperature of 800°C or more in an atmosphere containing 1000 ppm or more of hydrogen, to thereby clathrate a negative hydrogen ion (H^- , H^{2-} , H_2^-) into said selected compound at a concentration of $1 \times 10^{18} \text{ cm}^{-3}$ or more.

8. (Currently amended): A transparent electrode or wiring, which is formed using the compound as defined in claim 4 [[or 5]].

9. (Original): An optically writable and erasable 3-dimensional electronic circuit and 3-dimensional storage element, which is formed using the compound as defined in claim 5.

10. (Original): A negative hydrogen ion (H^- , H^{2-} , H_2^-)-conducting solid-electrolyte, which is formed using the compound as defined in claim 6.

11. (Original): A method of generating a negative hydrogen ion or hydrogen gas, comprising applying a given voltage to the compound as defined in either one of claims 1 to 3, to thereby extract a negative hydrogen ion from said compound.